

Notice of Allowability

Application No.

10/010,778

Examiner

Philip B. Tran

Applicant(s)

HARWOOD ET AL.

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/25/25.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Philip Tran
PHILIP B. TRAN

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Jason A. Reyes, Esq. (Reg. 41,513) on August 26, 2005.

3. The application has been amended as follows:

In the claims

Claim 1

In line 2, please replace the phrase "input/output" with --input and output--.

In line 7, please replace the phrase "control/management" with --control and management (control/management)--.

In line 13, after the phrase "network adapter;" please delete "and".

In the last line of claim 1, after the phrase, "interface on the network" please delete "adaptor." and insert the following --adapter; and wherein data is sent from a host computer through a second switching system in the network environment to the network adapter, which allows the data to be sent from the

network adapter to the second network data storage system without passing through the second switching system.--.

Claim 4

In line 4, please replace the phrase "input/output" with --input and output--.

In line 6, please replace the phrase "control/management" with --control and management (control/management)--.

In line 12, please delete "and".

In the last line of claim 4, after the phrase, "interface on the network" please delete "adaptor." and insert the following --adapter; and wherein data is sent from a host computer through a second switching system in the network environment to the network adapter, which allows the data to be sent from the network adapter to the second network data storage system without passing through the second switching system.--.

Claim 9

In line 2, please replace the phrase "input/output" with --input and output--.

In line 8, please replace the phrase "control/management" with --control and management (control/management)--.

In line 14, after the phrase "control/management interface;" please delete "and".

In the last line of claim 9, after the phrase, "network" please delete "adaptor." and insert the following --adapter; and wherein data is sent from a host computer through a second switching system in the network environment to the network adapter, which allows the data to be sent from the network adapter to the second network data storage system without passing through the second switching system.--.

Claim 12

In line 5, please replace the phrase "input/output" with --input and output--.

In line 7, please replace the phrase "control/management" with --control and management (control/management)--.

In line 13, please delete "and".

In the last line of claim 12, after the phrase, "the network" please delete "adaptor." and insert the following --adapter; and wherein data is sent from a host computer through a second switching system in the network environment to the network adapter, which allows the data to be sent from the network adapter to the second network data storage system without passing through the second switching system.--.

Allowable Subject Matter

4. Claims 1-16 are allowed.

5. The following is an examiner's statement of reasons for allowance: The cited prior arts fail to disclose or suggest a network adapter capable of being used to interface to a network environment a data storage system input/output (I/O) controller, the data storage system I/O controller residing in a first network data storage system, the network environment being external to the network data storage system, the network adapter comprising: port circuitry capable of being used to facilitate establishment of a link between the first network data storage system and a second network data storage system in the network environment, the second network data storage system being remote from the first network data storage system, the link, when established, facilitating establishment of a target device in the second network data storage system as a data mirroring device capable of comprising a mirror of data residing in a source device in the first network data storage system, said port circuitry being connected to the data storage system I/O controller via the second data and control/management interface on the network adapter; wherein data is sent from a host computer through a second switching system in the network environment to the network adapter, which allows the data to be sent from the network adapter to the second network data storage system without passing through the second switching system; and in conjunction with all other limitations in the claim.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip B. Tran whose telephone number is (571) 272-3991. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Philip B. Tran
Art Unit 2155
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